BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-CD11c/Itgax Antibody Picoband®

Catalog Number: A00357-3

About Itgax

CD11c, also known as Integrin, alpha X (complement component 3 receptor 4 subunit) (ITGAX), is a genethat encodes for CD11c. This gene encodes the integrin alpha X chain protein. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This protein combines with the beta 2 chain (ITGB2) to form a leukocyte-specific integrin referred to as inactivated-C3b (iC3b) receptor 4 (CR4). The alpha X beta 2 complex seems to overlap the properties of the alpha M beta 2 integrin in the adherence of neutrophils and monocytes to stimulated endothelium cells, and in the phagocytosis of complement coated particles. Two transcript variants encoding different isoforms have been found for this gene.

Submit a product review to Biocompare.com





Submit a review of this product to Biocompare.com to receive a $20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.

Overview

Product Name	Anti-CD11c/Itgax Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-CD11c/Itgax Antibody Picoband® catalog # A00357-3. Tested in ELISA, IHC, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	Q9QXH4

Technical Details

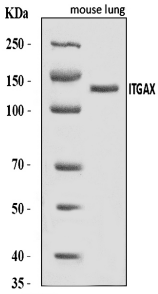
Immunogen	E.coli-derived mouse CD11c/Itgax recombinant protein (Position: P140-T342).

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

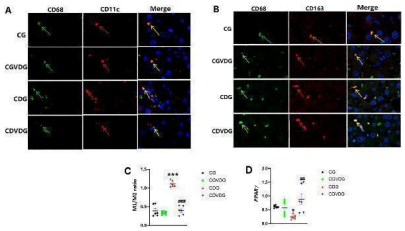
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Mouse Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Mouse, Rat ELISA, 0.1-0.5 ug/ml, -

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

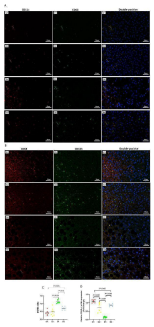
Anti-CD11c/Itgax Antibody Picoband® (A00357-3) Images



Western blot analysis of CD11c/Itgax using anti-CD11c/Itgax antibody (A00357-3). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: mouse lung tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD11c/Itgax antigen affinity purified polyclonal antibody (Catalog # A00357-3) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CD11c/Itgax at approximately 127 kDa. The expected band size for CD11c/Itgax is at 127 kDa.



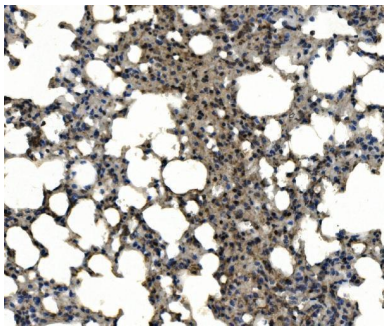
Effects of 1,25 VD3 supplementation on macrophage polarization and PPARgamma expression in NASH rats. (A) M1-type KCs identified by double immunofluorescence staining; green arrows indicate CD68-positive cells, red arrows indicate CD11c-positive cells, and yellow arrows indicate CD11c/CD68 double-positive cells (M1KCs). (B) M2-type KCs identified by double immunofluorescence staining; green arrows indicate CD68-positive cells, red arrows indicate CD163-positive cells, and yellow arrows indicate CD163/CD68 double-positive cells (M2KCs). Antibodies were diluted as follows: anti-CD68 (1:100), anti-CD11c (1:100), and anti-CD163 (1:200). (C) The M1/M2 macrophage ratio was determined by quantifying the proportion of M1 and M2 KCs in liver tissue, as identified through double immunofluorescence staining. (D) PPARgamma levels in liver tissue of the indicated groups were determined by qPCR and expressed as relative mRNA levels following normalization to GAPDH mRNA levels. Data are presented as mean ± SEM, n=6. *p < 0.05 and ***p < 0.001 vs CG; ##p < 0.01 and ###p < 0.001 vs CDG.Index in PubMed under a CC BY license. PMID: 40190400



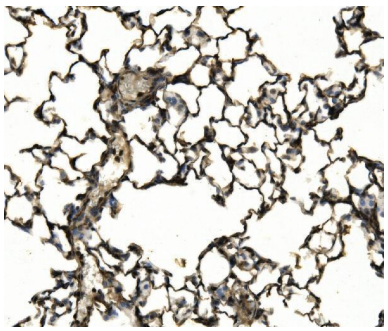
Effects of n-6 PUFA on liver macrophage phenotype in rats with NASH induced by a choline-deficient diet. (A) M1-type Kupffer cells (KCs) identified by double staining: red arrows show CD11c-positive cells, green arrows show CD68-positive cells, and yellow arrows highlight CD11c and CD68 double-positive M1-type KCs (Scale bar – 50 uM). (B) M2-type KCs identified similarly, with red arrows indicating CD163-positive cells, green arrows showing CD68-positive cells, and yellow arrows marking CD163 and CD68 double-positive M2-type KCs (Scale bar – 50 uM). For (A,B) (see) for full-size photomicrographs. (C) M1/M2 phenotype ratio (unitless),

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

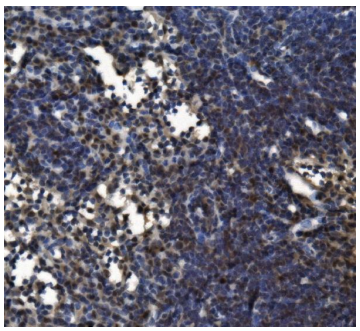
calculated as the proportion of CD68 + CD11c + to CD68 + CD163 + cells. (D) Relative PPAR-gamma2 mRNA expression (fold change normalized to GAPDH) in the liver, which is linked to macrophage polarization and inflammation. Data are expressed as mean ±SEM; n = 6/group.Index in PubMed under a CC BY license. PMID: 40626231



IHC analysis of CD11c/Itgax using anti-CD11c/Itgax antibody (A00357-3). CD11c/Itgax was detected in a paraffin-embedded section of mouse lung tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD11c/Itgax Antibody (A00357-3) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of CD11c/Itgax using anti-CD11c/Itgax antibody (A00357-3). CD11c/Itgax was detected in a paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD11c/Itgax Antibody (A00357-3) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



IHC analysis of CD11c/Itgax using anti-CD11c/Itgax antibody (A00357-3). CD11c/Itgax was detected in a paraffin-embedded section of rat lymph node tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CD11c/Itgax Antibody (A00357-3) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

3 Publications Citing This Product

1. PubMed ID: PMID:25691929, Expressions of CD11a, CD11b, and CD11c integrin proteins in rats with myocardial hypertrophy

2. PubMed ID: 10.1016/j.tranon.2016.12.002, Immunotherapy with Dendritic Cells Modified with Tumor-Associated Antigen Gene Demonstrates Enhanced Antitumor Effect Against Lung Cancer

3. PubMed ID: 23346371, Huang J, Zhu C, Zhang P, Zhu Q, Liu Y, Zhu Z, Wang M, Li W, Yang G, Dong N, Liu J, Chen L, Zhang Y, Yang R, Deng L, Fan J,

BOSTER
antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Wang X, Liu J, Ma B, Fu Q, Wu K. Sci Rep. 2013;3:1114. Doi: 10.1038/Srep01114. Epub 2013 Jan 23. S100+ Cells: A New Neuro-Im...

Visit bosterbio.com/anti-cd11c-itgax-picoband-trade-antibody-a00357-3-boster.html to see all 3 publications.

Anti-CD11c/Itgax Antibody

For Research Use Only. Not for use in diagnostic procedures.